Rex
REX MANUFACTURING CO.
CONNERSVILLE, IND. U.S.A.

Reliable
TRADE MARK
CORKBOARD
Manufactured by
Luse-Stevenson Co. 307 N. Mich. Ave., Chicago

Copeland
DEPENDABLE
Electric
REFRIGERATION
630 Lycaste Avenue, Detroit, Michigan

Ferro Porcelain Enamels are Known the World Over for their Snowy Whiteness and Easy Workability.

WRITE FOR "MEN & METHODS"

The Ferro Enamel Supply Co.
CLEVELAND, OHIO

NORTHEY
REFRIGERATORS
FOR ALL PURPOSES
ANY SIZE, STYLE OR FINISH
NORTHEY MFG. CO.
WATERLOO, IOWA
AGENCIES IN MOST LARGE CITIES
WATERLOO DIRECT TO YOU

BUSH CONDENSERS
Made in any size or capacity. Seamless Copper Tubes, Individual Fins, Maximum Efficiency.
BUSH MFG. CO.
Hartford, - - Conn.
WHITE-HANNA
302 Lincoln Bldg.,
DETROIT, - MICHIGAN

Increase Your Earning Power
Study ELECTRIC REFRIGERATION at home in spare time
Complete course covers all phases of the industry. Executives, salesmen, installation men and service men.
Send for FREE CATALOG
UTILITIES ENGINEERING SERVICE
EDUCATIONAL DIVISION
DEPT. 412, 3120 N. CLARK ST., CHICAGO

In writing to advertisers please mention Electric Refrigeration News.

NEW BOOKLET AND LEAFLETS

Dry-Zero

Four booklets have been received from the Dry-Zero Corp., Chicago, Ill., dealing with different phases of the manufacture and use of Dry-Zero blanket and pliable slab insulation. The first of these booklets is entitled, "Its Origin," the second, "Theory of Specific Surface Resistance," the third, "Typical Results of Use," and the fourth, "Higher Efficiency in Small Unit Refrigeration."

Frigidiare

Frigidaire Corp., Dayton, is supplying its dealers with a special Christmas broadside on the model T-5 featuring the time payment plan at $3.50 a week. This recently introduced model is described as "the ideal year round Christmas gift for the home."

Kelvinator

A special broadside has been worked up by Kelvinator, Inc., Detroit, for distribution by Kelvinator-St. Louis, Inc., St. Louis, Mo. This broadside illustrates the three Kelvinator sealtite self-contained cabinets and also photographs of a large number of apartments in that city which have already been equipped. A special Christmas envelope stuffer with an appeal to the husband was issued some time ago for Kelvinator dealers in connection with the holiday season.

Ranco

The Automatic Reclosing Circuit Breaker Co., Sixth and Wesley Ave., Columbus, Ohio, has recently issued bulletin No. 601 on the Ranco refrigerator control. The bulletin contains a cutaway diagram showing the design of the switch, also charts indicating the accuracy of the control when placed in different positions on the brine tank. Information is also given on the theory of the operation of the control, its temperature range, construction, the period of its life, capacity and its application.

Rex

Rex Mfg. Co., Connersville, Ind., has recently sent out an attractive folder in blue and gold which contains individual leaflets on the various models of cabinets manufactured by the company, with photographs of the cabinets both closed and open and specifications on each.

Servel

Servel *Refrigograms* for November, published by the Servel Corp., Evansville, Ind., has been received. This issue is the first since August, and features the New Servel. According to an editorial with this heading the new Servel will not be a new machine but will instead be the same machine with a new organization and spirit behind it. Seven pages of the sixteen-page magazine are devoted to illustrations and a description of the manufacture of the Electrolux-Servel machine.

Voss

From the J. H. H. Voss, Inc., 121 Prince St., New York City, comes the *Voss Valve News*. This paper which is written to be of particular interest to the refrigerating engineer, contains a number of photographs of refrigerating plants and detailed diagram of the valves being used in them. The company manufactures high-speed, ring-plate valves for reciprocating piston compressors used with ice making and refrigerating machinery. These valves may be used with all refrigerants including carbon dioxide. The company will gladly send copies of *Valve News* upon request.

Zerozone

The Iron Mountain Co., 939 East 95th St., Chicago, has recently sent out a broadside on their Zerozone Bottle Vender. This self-contained cabinet dispenses bottle beverages cooled by a Zerozone twin-cylinder refrigerating unit upon the insertion of a coin. The cabinet will hold 96 standard size bottles.

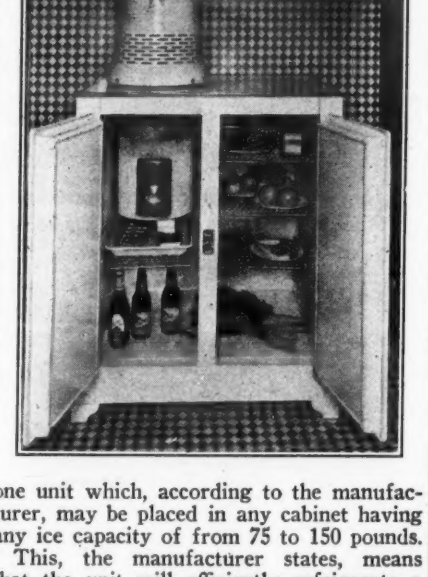
COPELAND SHOWS NEW WATER COOLERS

The accompanying photographs show the recently announced Copeland automatic water coolers. One of these has the sanitary bubbler for city water supply, and the other is for bottled water. Model K has a single cylinder compressor, 1/6 h. p.

motor and 6 gallons per hour cooling capacity. Model L has also single cylinder compressor, ¼ h. p. motor and a capacity of 14 gallons per hour. The lower frame is of steel and the upper part of wood. The finish is of pyroxylin lacquer. The insulation is 3-inch cork. One bowl assembly with attachments for spout or bubbler is standard on all models.

SNOW QUEEN NOW IN PRODUCTION

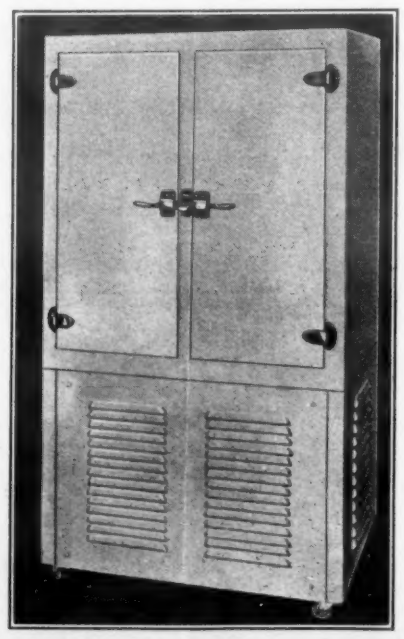
The Hvid Ice Machine Corp., First National Bank Bldg., Chicago, is now in production on the Snow Queen electric refrigerator shown in the accompanying photograph. In this machine the compressor and the cooling tank are combined in



one unit which, according to the manufacturer, may be placed in any cabinet having any ice capacity of from 75 to 150 pounds. This, the manufacturer states, means that the unit will efficiently refrigerate a 12 cubic foot cabinet. Methyl chloride is used as the refrigerant. The unit is charged, tested and hermetically sealed at the factory.

MODEL H7 OF THE PLYMETL LINE

The photograph below is of the Model H7 Plymetl Air Tite refrigerator with vitrolite lining. The over-all dimensions of the cabinet are: width 34", depth 25", height 61⅞". The cabinet has a net food storage volume of 7½ cu. ft., and shelf



area of 14 sq. ft. The insulation is of monolithic cork varying in thickness of from 2⅛" in the doors to 3¼" in the bottom. The exterior of the cabinet is Plymetl. The net weight is 424 lbs.

OVERSEAS PROSPECTS TO RECEIVE CATALOGUE AND DIRECTORY ISSUE

Extra Distribution of January 4 Issue to Promote Export Business

The "Catalogue and Directory Number" of ELECTRIC REFRIGERATION NEWS, January 4, 1928, will be mailed to a selected list of companies and individuals which represent centers of information for American-made goods, as a part of the large extra distribution to be given this feature issue—the first of the new year. Copies will be sent representatives of the U. S. government, and importing firms in the principal cities of the world. The U. S. Dept. of Commerce and the American Manufacturers Export Association are co-operating in this plan.

The larger manufacturers of electric refrigeration equipment have already made notable progress extending their distribution in foreign countries throughout the world. Those who have made a careful study of the market possibilities have brought back most favorable reports. There is an active demand for this modern service in all parts of the world. This is especially true in all countries which do not have commercial ice delivery such as is known in the United States.

China, for example, has proved to be a most interesting field for development. The protection of food is one of the most difficult problems encountered by Americans and Europeans, thousands of whom are now residents of this vast territory. South America is another promising field for export business. In the equatorial countries there is pressing need which only electric refrigeration can supply.

England, France, Germany and other European countries are developing as substantial export markets and the field is being actively cultivated by advance agents of the leading manufacturers.

REQUESTS FOR INFORMATION

The following inquiries have been received by ELECTRIC REFRIGERATION NEWS. Readers who can supply information on these subjects are invited to write at once, referring to the Query number.

Wants Names of Commercial Machine Manufacturers

Query No. 46—"Is it possible for you to furnish us, or arrange to have furnished us, literature on commercial refrigeration, or if this is not possible, can you furnish us with a list of manufacturers of commercial units to whom we can write for specifications, prices, etc."

"PLEASE CHANGE MY ADDRESS"

Recent movements of Electric Refrigeration News subscribers as indicated by requests for changes in mailing addresses.

Renaud, Paul F., from 1532 St. Charles Ave., c/o Edw. N. Eberling & Co., Dayton, Ohio, to 1001 Camp St., c/o Frigidaire Corp., New Orleans, La.

Olin, C. L., from 1740 Van Ness Ave., c/o Servel Corp., San Francisco, Cal., to 1631 Poplar St., c/o Servel Corp., Oakland, Cal.

Adams, H. A., from Hotel Medford, Milwaukee, Wis., to 918 S. Michigan Ave., Chicago, Ill.

Demarest, S. E., from 235 Potter Ave., Astoria, N. Y., to 52 Blauvelt Ave., Bergenfield, N. J.

Tinkey, Otto G., from 6344 Walnut St., Pittsburgh, Pa., to 205 N. Highland Ave., Pittsburgh, Pa.

Russell, A. E., from 333 Hudson Ave., Albany, N. Y., to 749 Boylston St., c/o Kelvinator Inc., Boston, Mass.

Modern Appliance Co., from 136 N. Rose St., Kalamazoo, Mich., to 203 E. South St., Kalamazoo, Mich.

Hillabrand, C. M., from Lakeland Kelvinator Co., Inc., 227 S. Tennessee Ave., Lakeland, Fla., to 1851 Euclid Ave., Cleveland, Ohio.

Broughton, J. M., from 53 Richmond W., Toronto, to 88-A Bain Ave., Toronto, Ont.

Bartelt, Wm. A., from c/o O. Schmidt, Elkhart Lake, Wis., to 514 W. 5th St., Appleton, Wis.

THE CONDENSER

A CLASSIFIED COLUMN OF OPPORTUNITY

REPLIES to box number advertisements should be addressed to Electric Refrigeration News, 554 Maccabees' Bldg., Detroit, Mich.

ADVERTISING RATES—this column only:

POSITIONS WANTED (special rate if paid in advance): 50 words or less, one insertion, $2.00, additional words 4 cents each. Three insertions, $5.00.

POSITIONS AVAILABLE, For Sale, Business Opportunities, and all other classifications (special rate, if paid in advance): 50 words or less, one insertion, $3.00, three insertions $8.00, additional words, 5 cents each.

LINE RATE (open account): 50 cents per line.

POSITIONS WANTED

National service and educational director, ten years' successful experience with some of the largest manufacturers, at present employed, desires connection with strong growing concern. Capable of organizing and taking complete charge of national or division service, preparing service or sales manuals, educational program, parts price list, etc. Favorably known throughout the trade. Box No. 58.

Chief Engineer available, connected with leading electric refrigeration concerns past eight years. Inventor and owner of patents on thermostat control and seals. Well acquainted with patent situation. Experienced designing engineer. Box No. 52.

Sales Executive of ten years' successful experience, two of which in electric refrigeration, desires interview with manufacturer or large distributor who places profits and service above large volume regardless of cost.

Experience covers Branch Managership, retail and wholesale selling, Manager of retail and wholesale sales, details and results of which will be gladly furnished.

Compensation secondary consideration if real future opportunity exists. Box No. 60, Electric Refrigeration News.

POSITIONS AVAILABLE

Combination gas electric utility, thirty thousand customers, requires services first class merchandising sales supervisor. Applicant must have had extensive and successful experience in gas and electric appliance sales field, be familiar with campaigns, advertising and supervision of sales people and sales rooms. Salary basis with commission on gross sales. Please furnish detailed experience, references, etc., first letter. P. O. Box 371, Williamsport, Pa.

The Manufacturer of a well known and successful machine has opening for three men for territory development in south and middle west. Only high grade men with successful record in field work will be considered. Give all details in your first letter. Address replies to Electric Refrigeration News, Box No. 59.

FOR SALE

Factory buildings, machinery, tools, patterns for commercial machine. Equipment practically new. Will sell on time payment or lease. No objection to accepting stock in another company for entire assets, or consolidating with another company, putting in additional capital, if desired. For further information address J. F. Brown, 209 Lee St., Zanesville, Ohio.

Carrier Engineering Corp. Has New Stock Issue

Announcement has been made by the Carrier Engineering Corp., Newark, N. J., of the issuance of 50,000 shares of convertible preference stock without par value, at $27 per share. The corporation specializes in the field of scientific air conditioning and its equipments are installed in a number of theatres throughout the country, which include the Roxy, Paramount, Rialto and the Ziegfeld, all in New York

Hot Springs Salesman Wins Check for $150

Fred L. Gilman, of Gilman & Kennedy Co., Frigidaire and Delco-Light products dealer, in Hot Springs, Ark., is the recipient of a check for $150 as the second capital prize in an eleven weeks contest for salesmen employed by companies under the distributorship of W. P. Galloway Co., Little Rock, Ark. During the eleven weeks contest Mr. Gilman sold 39 units, which sales were largely instrumental in placing his company in sixth position in the state and fourth in the western division on shipments.

SHAFT SEALS
THERMOSTATS—FLOATS
HIGH PRESSURE CUT-OUTS
LIGHT STAMPINGS
Automatic Controls for Refrigeration and Oil Burners
GOODNOW & BLAKE MFG. CO.
3840 BEAVER STREET
DETROIT, MICH.

Patented—Springless Automatic
Builders of Distinctive Refrigerator Hardware for
Patented TRIPLOCK
Electric Refrigeration
WINTERS & CRAMPTON MFG. CO.
GRAND RAPIDS, MICH.

Subscription Order

BUSINESS NEWS PUBLISHING CO.
554 MACCABEES BLDG.
DETROIT, MICH.

Gentlemen:

Please enter my subscription to ELECTRIC REFRIGERATION NEWS, the Business Newspaper of the Electric Refrigeration Industry.

United States: ☐ $1.25 per year ☐ Two years for $2.00.
Foreign Countries: ☐ $1.50 per year.

I am enclosing payment in the form of

☐ Check ☐ P. O. Order ☐ Cash ☐ Stamps

Name .....

Street Address .....

City and State .....

Remarks: .....

☐ NOTE: If it is inconvenient for you to enclose payment with this order, check this square and invoice will be mailed. Do it now, while you have the blank before you. It will save the time and trouble of writing a letter and you will be sure to get the next issue.

ELECTRIC REFRIGERATION NEWS

The business newspaper of the electric refrigeration industry

VOL. 2, NO. 8, SERIAL NO. 32 | DETROIT, MICHIGAN, DECEMBER 21, 1927 | Entered as second class matter August 1, 1927, at the Post Office, Detroit, Michigan. | PRICE TEN CENTS

"REFRIGERATION IS FURNITURE MAN'S BEST FUTURE BET"

Pueblo Man Says Well Installed Unit is Secret of Success

By Willis Parker

"Electric Refrigeration—What Does It Mean to the Retail Furniture Dealer?"

This was the subject discussed at the annual meeting of the Rocky Mountain Retail Furniture Association in Denver, Colo., November 26, and which brought forth some excellent thoughts on the subject, especially those of N. W. Calkins, of the Calkins-White Brothers Furniture Co. of Pueblo, Colo. It developed that Mr. Calkins probably has made greater success with electric refrigeration than any other furniture dealer in the Rocky Mountain region, and, on the side, he told the writer than the total business of his company in the past year showed a remarkable increase over the previous year, but that he was satisfied that the gain had not been made in furniture but in electric refrigeration.

In the course of his remarks before the convention, all of which were impromptu and adduced through questions asked by the other members, Mr. Calkins declared that the furniture dealer's best bet for the future was in handling electric refrigerators.

A Chance To Move Large Size Ice Boxes

"Electric refrigerators are household furniture as much as are tables, chairs, bedroom suites and the like, and therefore should be handled by the furniture dealer," he said. "It fits in well with other merchandise and there is not one of us who has not experienced a decrease in sales of larger sizes in ice-boxes in the past several months. Our only salvation, then, is to replace the big boxes with electric refrigerators. Where we are handling makes of electric refrigerators that permit remote installations, we can sell our large boxes and equip them with electric refrigeration. That is why we do not handle the self-contained electric refrigerators and prefer remote installations, for it not only assists us in selling our large size ice-boxes but eliminates the necessity of taking in used refrigerators as part payments on electric types.

"We have been in the game three years and have yet to receive our first serious complaint. Success in the line depends upon proper installation and that is where we make our friends, for we have two of the best obtainable service men in our employ. *We do not average one call per year per machine for service.* This proves to the buyer that electric refrigeration is right, and he, in turn, helps us sell additional machines by praising our line, our installations and our service to his friends. In fact, we have had no assistance from factory service men. They have come around to help us, but after seeing the installations we have made, they can find no faults and can offer no suggestions.

(*Continued on Page 2, Column 2*)

WARD ELECTRIC REFRIGERATOR COMPANY SOLD AT AUCTION

Stock, equipment and patent rights of the Ward Electric Refrigerator Co., Buchanan, Mich., valued at $18,000, were sold at auction on December 1st to Jacob C. Rough, a retired farmer, for $6,000, according to a dispatch in the Benton Harbor, Mich., *News-Palladium*, Dec. 2.

Mr. Rough is said to represent Wm. E. Eiler, a Chicago and Lakeside, Mich., real estate dealer and other out of town capitalists. It is also reported that these men intend to organize another company and continue to manufacture the refrigerator in Buchanan.

Harleigh W. Riley, manager of the Buchanan office of the Michigan-Indiana Electric Railway Co., bought the patent rights, good will and right to use the name for $150.

The building valued at $15,000 was sold to Wm. J. Miller, a Buchanan contractor who constructed it.

The Ward Electric Refrigerator Co. moved to Buchanan from Detroit last year and conducted a $40,000 stock campaign in March. L. W. Ward of Detroit was president of the company.

LEADING Refrigerator manufacturers use Monel Metal screws with Monel Metal trim.

Write for details to
The International Nickel Company (Inc.)
67 Wall Street New York, N. Y.

MONEL METAL

Colored Cabinets a Decorative Feature of Detroit Furniture Dealers' Christmas Window

Christmas Display of the Gardner White Co., 6309 Mack Ave., Detroit, Mich.

REFRIGERATION VITAL TO MODERN CIVILIZATION

Industry is Selling a Service, Not Merely a Commodity

"The world at large little understands the great extent to which the ice man and the refrigerating engineer are public servants, whose service saves not only food, but labor, money, time, energy, health and life itself," declared Frank W. Smith, vice-president of the United Electric Light and Power Co., in an address at the banquet of the twenty-third annual meeting of the American Society of Refrigerating Engineers in New York City, December 6, mentioned in the December 7 issue of ELECTRIC REFRIGERATION NEWS.

Speaking before the leaders of the ice industry, the refrigerating industry, and the manufacturers of air-cooling and other refrigerating equipment, Mr. Smith pointed out that the first commercial shipment of ice from America, more than a hundred years ago, "was sent to the West Indies to help stay the ravages of yellow fever, and was, therefore, a vital service to humanity, not merely a business transaction.

"If the truth were generally known," Mr. Smith said, "ice and refrigeration would be recognized as among the most vital services required by modern civilization; that we could no more get along without these services than without gas, electricity or water; and that the progress of civilization to date would have been very much regarded, if not wholly impossible, without this service.

Ice Used to Fight Yellow Fever

"If any of you ice manufacturers, or refrigerating engineers ever get downhearted, ever doubt whether in this business you are doing anything more than making money," Mr. Smith said, "read Britannica, or any other encyclopedia, on the part that ice has played in the fight on yellow fever, and you will come away with the feeling that you are contributing as much to the betterment of life as the doctor, the minister, the artist, or the public utility.

"You will not understand me to imply that ice alone has rid the United States, Panama, and the South American republics of yellow fever; but I am sure the medical profession will agree that without ice it would have been almost impossible to stop the ravages of this devastating epidemic disease."

Discussing the size and ramifications of the ice and refrigerating industries, Mr. Smith said, that "comparatively few people are aware of the fact that there is used each year in the United States approximately one thousand pounds of ice for each person in the country—man, woman and

(*Continued on Page 7, Column 1*)

L. M. SIMPSON ELECTED ELECTRO-KOLD PRESIDENT

Electro-Kold Corp., Spokane, Wash., manufacturers of domestic and light commercial electric refrigeration equipment, announces the election of L. M. Simpson as president and general manager of the corporation effective December 1. Mr. Simpson was one of the founders of the Washington Electric Supply Co., of Spokane, which was recently sold to Westinghouse interests. He was the developer of a number of central stations, including the Grangeville Power & Light Co., Deschutes Power Co., Orofino Power & Light Co. These central station properties were recently sold to the Pacific Power and Light Co. of Portland, Oregon.

Mr. Simpson was attracted to electric refrigeration during his association with central station developments, and now takes the place of C. L. Lewis, former general manager of the Electro-Kold Corp., who has resigned to take care of personal affairs.

The announcement also states that sales for the entire year of 1926 were equaled on August 18 of this year, and present indications are that 1927 sales will run 63% over those in 1926. Electro-Kold Corp. confines its sales distribution to the eleven western states. Incorporation of the company dates from 1923, at which time actual production was started. Two years previous to that time was spent in development work and the first Electro-Kold machines were put in operation in 1922. No public financing of the company has ever been attempted.

HAVILAND NOW VICE-PRESIDENT OF ICELESS COOLER CORP.

Iceless Cooler Corp., 225 North Michigan Avenue, Chicago, Ill., announces the appointment of James D. Haviland as vice-president in charge of production and service, effective December 1. Mr. Haviland will be located at the factory in Chicago. He was formerly with Nizer and General Necessities, supervising ice cream cabinet construction and inspection.

Ayer Agency Secures Kelvinator-Nizer Account

N. W. Ayer & Son, Philadelphia agency, will direct the advertising for the Kelvinator and Nizer divisions of the Electric Refrigeration Corp., Detroit.

Tubing for condensers

Smooth. No possibility of scale. Up to 100 foot lengths. Formed to your order.
1431 Central Ave., Detroit, Mich.

WOLVERINE TUBE

SEAMLESS COPPER & BRASS TUBING

APPLICATIONS OF CARBON DIOXIDE ICE EXPLAINED

Particularly Adapted to Carload Shipments of Perishables

(Editor's Note—Excerpts from an address by Walter E. Ditmars, president of Carbice Corp., New York City, delivered at the 21st annual meeting of the Eastern Ice Association in New York City, Nov. 29-Dec. 1.)

Artificial refrigeration is not a recent innovation. From the moment when the physicist first found the relationship of pressure to temperature, new discoveries were constantly being made by scientists working in this field. First successfully demontrated more than a century ago, artificial refrigeration was not put into general use until the last decade of the past century, mechanical refrigeration following by about ten years. Now artificial refrigeration is indispensable to the people of the United States and is responsible, to a large degree, for the nation-wide foodstuffs markets that have been opened up.

Until recently scientists and engineers have concerned themselves mainly with producing ice from water and yet the use of carbon dioxide as a refrigerating agent was universally known many years ago. Used mechanically to a limited extent, carbon dioxide refrigeration now has been developed on a commercial scale along non-mechanical lines.

Theoretically any gas by sufficient pressure and low temperature can be liquefied or even frozen solid and actually nearly all gases have been liquefied. Carbon dioxide, the well known gas of almost universal distribution, has been known and used commercially in liquid form for years, for soda water gas and for many other purposes. It has now come into commercial use frozen into a solid. Unlike ordinary ice, solid carbonic does not melt, but rather evaporates as a gas, leaving no wet, sloppy residue. It is interesting to note more fully the nature of solid carbonic, its properties and how it is made.

Gas is Entirely Safe

Carbon dioxide, CO_2 at ordinary temperature, and at atmospheric pressure, is a gas, fully oxidized carbon. Unlike carbon monoxide (CO), the partially oxidized carbon, which is deadly poisonous, carbon dioxide is entirely harmless—in fact, we exhale it in our breath. It is present in the air to the extent of about 3 parts to 10,000. It is produced whenever carbonaceous matter burns in air. When a ton of coke is burned, upwards of three tons of carbon dioxide passes up the flue. It is the gas produced in alcoholic fermentation. Breweries, alcohol plants and sugar refineries produce large quantities of it. It is also

(*Continued on Page 4, Column 3*)

DETROIT SECTION A. S. R. E. JOINS NATIONAL BODY

First of Local Groups to Affiliate Under New Plan

At the annual meeting of the Detroit section of the American Society of Refrigerating Engineers held at the Detroit Engineering Society club house, 478 West Alexandrine Avenue, Detroit, Mich., Monday evening, December 19, the proposed plan for affiliating the membership of local sections with the parent society was discussed and unanimously adopted insofar as it affects the Detroit membership. According to the new membership plan, a fourth grade of membership is provided in addition to the full member, associate member and junior member classifications previously available. The new classification is designed to permit the enrollment of members whose qualifications are insufficient to justify the higher grade, but whose interest in the refrigeration industry is great enough to warrant active participation in the affairs of the organization.

According to the action taken, the one hundred and forty-five members of the Detroit section will become enrolled as affiliate members of the parent society. There are, however, some thirty members of the local section who are already members of the national body. Under the new arrangement local members will pay their dues directly to the headquarters office, and the local section will be reimbursed for local operating expenses. A movement has been started to expand the affiliate membership under the new plan, with a view to having complete representation at the time of the spring meeting of the national A. S. R. E., which will be held in Detroit next June.

The dues of the new affiliate membership will be only $7.50 per year. This low rate has been established to widen the scope of the society's contact and permit the enrollment of a considerable number of younger men in the industry.

It is expected that similar action will be taken by other local sections of the society in Chicago, Milwaukee, New York, St. Louis, and other cities. The plan is also expected to stimulate the organization of additional sections in cities not now represented. Prominent members of the Detroit section voiced their satisfaction in having this group be the first to adopt the new plan, since it expresses the confidence of the membership in the new national president, George B. Bright, of Detroit. It will also put the section in a position to make preparations for the entertainment of the national society at the coming spring meeting.

Other business transacted at the meeting included the re-election of C. C. Spreen and L. S. Keilholtz as president and first vice-president, respectively, of the Detroit section. Other local officers, namely, W. D. McElhinny, Don G. Ellis and A. D. McLay, retain their positions as second vice-president, secretary and treasurer, respectively, for the ensuing year. The next regular meeting will be held February 13. On March 23 there will be a special meeting, held jointly with the Detroit Engineering Society.

EL PASO ELECTRIC COMPANY DISPLAYS UNIT IN STREET CAR

Street car riders upon entering one of the cars of the El Paso Electric Co., El Paso, Texas, are greeted with the sight of an electric refrigerator filled with perishable food displayed behind a glass door, according to an article which appeared in the December 10 issue of *Electrical World*.

The photograph which accompanied the item shows an electric refrigerator installed at the front end of the car, just behind the operator, where all boarding passengers are attracted by the display.

The installation was made by replacing the standard alternating current motor with a 110-volt direct current motor, a resistance of 220 ohms being connected in series to enable the unit to be operated from the 550 volt trolley circuit. A card on the top of the refrigerator features the value of electric refrigeration in winter. About 36,000 passengers per month ride this car, and it is reported that many live prospects have been obtained through the exhibit.

An Outstanding Sales Feature for REFRIGERATORS

WIRES PATENTED
"AIRTITE"
CUSHION
GASKET

CLAIMS MARGINS INADEQUATE FOR FURNITURE STORE

Electric Refrigerators Attract Prospects for Other Lines

By Charles P. Rodman

"I believe the factories manufacturing electric refrigerators will in time see that the best method of marketing their goods is through branch offices in all large cities," said A. J. Bartlett, assistant manager of the Orchard & Wilhelm Co., large furniture dealers of Omaha, Neb. "It is hardly possible for a furniture house to successfully market electric refrigeration on account of the high overhead," said Mr. Bartlett. "The fact that the refrigerators are handled on a margin of 40 per cent when the expenses of operating a first-class furniture house usually exceed 30 per cent is not real inviting to the furniture dealer."

The Orchard & Wilhelm Co. has been selling machines and will continue to do so the coming year, although the profit is not such as would really please Mr. Bartlett. He concedes that the store must, for the present at least, carry a line of electric refrigerators. This is necessary in order to keep prospective customers for other merchandise in line. Mr. Bartlett realizes that electric refrigeration must be sold as a specialty and is now seeking good men for the selling end of the business.

Salesmen Trained and Given Prospects

Orchard & Wilhelm Co. maintain a school of instruction for their specialty salesmen. This is found necessary, as only about one-fifth of the men who apply stay long enough to make first-class salesmen, so something must be done to keep the ranks filled. This house will have at least twenty salesmen on the refrigeration end of the business the coming season. Mr. Bartlett endeavors to furnish all men with prospects and uses the other departments of the store to aid him in this. He never sends a man to a home until first gaining the consent of the housewife.

The newspaper advertising gives him many of his prospects. He has also found that the model kitchen maintained in the store attracts many prospects. Of course, an electric refrigerator is part of the kitchen equipment.

Mr. Bartlett has also found that the best prospects are people under fifty years of age. When they reach that age they are generally tied to some certain custom, and it is very hard to induce them to accept some new method. He has also found that the best time to make calls is from nine to eleven-thirty in the morning. Another thing he advises is to choose your prospects from the middle class of people. Find the home that is owned by the occupants, the home where the wife still does all, or part of her housework. Here it is much easier to explain the good points of electric refrigeration than where the work is done by maids or where the home is rented.

Recommends Line for Specialty Salesmen

Notwithstanding the problems encountered by the furniture store handling electric refrigeration, Mr. Bartlett believes it to be the coming thing and advises specialty salesmen to take it up. He looks upon this much in the same way many people did upon the auto in the earlier days. It is bound to win, but he thinks the factory should handle the proposition for the present, that is, for economy in marketing.

Another large furniture house virtually backed Mr. Bartlett up in his views. The manager of this house (who refuses to allow his name made public) says the margin allowed by the factory is too little as long as all selling must be done by specialty salesmen. He also states that furniture houses in the West cannot do that kind of selling, as it is far too expensive. As long as the factories insist on fixing the retail selling price, this house will keep a few in stock just to satisfy customers who call at the store, but will not make the canvass necessary to effect sales in any quantity.

Another furniture store that carries electric refrigerators is Peterson & Schoenning, of Council Bluffs, just across the Missouri river from Omaha, and only six miles distant. This house is virtually a selling agent for Orchard & Wilhelm Co., so the same plans are followed as outlined by Mr. Bartlett.

Thus we have the general opinion of furniture dealers in Omaha and vicinity rather adverse to electric refrigeration at this time, although all will continue to carry some stock. This will be done more with the idea of self-preservation than any intention to make very much out of the deal.

New Jacksonville Retail Organization

Jacksonville Electrical Refrigeration Co., Jacksonville, Florida, has been organized to deal in electrical and mechanical specialties. Two hundred and fifty shares of $100 par value have been issued. F. M. Ironmonger, C. L. Gaines, Jr., and W. R. Frazier make up the board of directors.

ELECTED PRESIDENT OF ELECTRO-KOLD CORP.

L. M. Simpson

Newly Elected President and General Manager of Electro-Kold Corp., Spokane, Wash. (See Page 1.)

REFRIGERATION IS FURNITURE MAN'S BEST FUTURE BET

(Continued from Page 1, Column 1)

"The secret, then, is knowing your machine and correctly installing it.

Business Built on Satisfied Users

"When we went into electric refrigeration three years ago, we went into it slowly. I first installed one in my own home, and, to get accurate information on the costs of operating, I had it connected through a special meter. I found that with the rate prevailing, my electric current costs were not more than $2.90 during July, the hottest month of the year. Had I been using ice, my ice bill for the month would have been around $6.00. Hence, from actual experience, we would discuss operation costs with prospective customers.

"We have built our business slowly but surely with a firm determination to make every installation absolutely satisfactory from the very start so that each customer would bring us one or two more. Last year we sent questionnaires to all of our customers to get detailed information on what they thought of the machine and the response was more than gratifying. We have an excellent stack of letters to show prospective customers.

"Referring again to installation, which I believe is the most important thing, we find that correct installation eliminates the necessity of having a sales organization especially trained in and cognizant of all of the hundred and one things involved—technical, mechanical and selling points. Knowing that the machine will be properly installed, if purchased, the customer doesn't care a rap about the mechanical construction of the machine. What she wants to know is 'What will it do for me?' and not 'How will it do it?' Hence our regular furniture sales staff can sell electric refrigerators just as well as can the so-called electric refrigerator salesmen.

"Our service men—installers—may be used for other electrical service work such as servicing electric washers, sweepers and the like, so that we can always find plenty for them to do. In fact, they know their 'stuff' so well that we actually service other makes of machines sold in our city.

Another Way to Get Prospects

"We have no trouble getting prospects either, for we have a plan that not only makes us a profit on uncovering prospects but also pays the salary of the man engaged in uncovering them. Through a special arrangement with a manufacturer we obtained a large number of water bottles that may be placed in the refrigerator to keep a supply of ice cold water. The average housewife fills a mason jar and puts it in the ice compartment. This bottle is better and we can sell it at a popular price. The outside salesman calls at homes and offers the bottle for sale. Then to illustrate how it fits into the ice box, he is permitted to enter the kitchen. Then he has an opportunity to casually mention electric refrigerators to the customer. If she shows interest, she is a prospect and is placed on our prospect list for literature and sales interviews.

"Now what is the future of electric refrigeration as it concerns the furniture dealer? To my mind, it is his best bet. To date not 3 per cent of the potential customers have been sold. Like all new appliances that sell for a high price, the sales resistance at first is tremendous. Supposing there were no automobiles and suddenly a good car was placed on the market at $2,000—it would be hard to sell, but, as the number of sales increased, the sales resistance would be decreased. It is the same way with electric refrigerators. It was much harder three years ago to sell them than it is now and two years from now it will be far more easy. You have homes, hotels, restaurants, ice cream stores, drug stores, florist shops, church kitchens and apartment houses to work upon now. And I predict that it will not be long before homes and offices will be cooled with electric refrigeration installations which the furniture dealer can sell along with present day merchandise.

Trade-Ins Not Yet a Problem

"We are not confronted with the proposition of trade-ins at present and will not be for some little time. We will not have to sell two machines to dispose of one—a used one and a new one. There should be much money to be made in the next few years and the furniture dealer should get into the game. If he does get into the game, he must get into it in earnest and with enthusiasm.

"Of course the question of installment selling will come up. It has already. Thus far we have been able to handle our own paper and our terms are 20 per cent down and the balance in twelve months. When the time does come that we need assistance in handling the paper, we can get it through finance companies just as the automobile concerns have at present.

"Not only does electric refrigeration provide good profits now on the appliance itself, but it is a protection to our other merchandise lines and helps us sell other goods, for there is nothing that makes us so many friends and future customers as well installed electric refrigerators."

GENERAL MOTORS BUYS LONG BEACH FACTORY SITE

General Motors Corp. is contemplating the erection of a plant at Long Beach, California, which will employ 12,000 workers for the manufacture of Chevrolet automobiles and Fridigaire Electric Refrigeration equipment, according to a report in *Forbes Magazine,* December 1 issue. The report states that options have been secured on Long Beach Harbor tracts of 600 and 350 acres each, and it is expected that they will be exercised before January 1, 1928.

One phase of production handled better with no investment

Stampings and pressed metal parts—to produce them yourself requires costly equipment, men, capital tied up in materials.

G. P. & F. can not only shoulder responsibility for stamping production from blue print to the finished part but lend 47 years' engineering experience in designing stampings for all fields. All without investment—and generally at a price per piece your own plant can't equal.

Get complete facts by writing for a copy of the booklet "Stampings." Also send a blue print for an estimated price, if possible.

GEUDER, PAESCHKE & FREY CO.

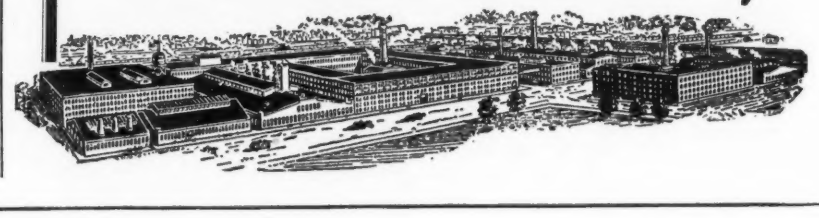
Sales Representative in principal cities in all parts of the country

1366 St. Paul Avenue, Milwaukee, Wis.

345 W. Ohio Street, Chicago

G.P.&F. STAMPING

"KNOWING HOW SINCE '81"



For both of us

(Meaning You and us.)

CABINETS BY

Seeger

SAINT PAUL

Will use ten (10) full pages in

THE SATURDAY EVENING POST,

with other magazines in support during nineteen twenty-eight.

SEEGER REFRIGERATOR COMPANY

SAINT PAUL, MINNESOTA

How the Boston General Electric Distributor Delivers the Goods

The Electric Refrigerator Company of New England, Boston, Mass., is well equipped to deliver General Electric Refrigerators. Above is shown a part of their fine fleet of delivery trucks and uniformed drivers lined up in trim formation

SAYS INDUSTRY'S MAN POWER NEEDS ORGANIZATION

Manufacturer Should Adopt A Plan and Stick With It

That the practice of electric refrigeration manufacturers of changing distribution systems at frequent intervals is uneconomical for both the manufacturer and dealer, is the opinion of a reader of the NEWS who has given considerable thought to the problems confronting the industry. "I have been thinking seriously," he says, "about the electric refrigeration industry as a whole, and why so many manufacturers do not seem to know what course to follow in order to obtain the volume of sales to make it a profitable business.

"Where is the trouble? Who is at fault? Is it the manufacturer, the distributor or the dealer, or all three?

Finds No Fault With Product

"Personally, from what I can observe and also the information I obtain from others who have given the matter serious thought, the difficulty lies primarily with the manufacturers." He continues: "They build a good unit, they test it thoroughly and they are satisfied beyond a shadow of a doubt that their unit should sell rapidly because it does perform and does do everything that could be expected of any machine, built for that purpose. They are able to buy good material, they have facilities for manufacturing in volume—in fact, there is nothing wrong from the manufacturing angle. What seems to be the matter? How can proper distribution be obtained? This is not such a difficult problem when you really think about it seriously.

Plans Changed About Every Six Months

"Who, among the various manufacturers, has tried out any plan of procedure long enough to decide definitely whether the plan is good or bad. A number of them have tried out a certain plan for a year, or possibly only six months; it did not look as though it was giving them the desired results and they called a conference and someone offered another plan. They all agreed that at last they had found a solution and started out on another policy, only to awaken to the fact in about six months or so that this new plan was not just what they expected it would be—now what can be done?

"The whole industry is unsettled. If we changed our diet as often as these manufacturers change their ideas and plans of distribution, we would be uncomfortable and all out of fix.

"Let me give you the experience of a large implement manufacturer who some thirty years ago, at the close of a poor year, called its salesmen together and told them that it had been decided that next year there would not be any representatives in the field. The president said, 'We will let the dealer get the business and forward the orders into the factory, and we will fill them.' Just four months elapsed when this implement manufacturer discovered that business had decreased about 65%. They immediately began to look for their representatives and found some of them.

Answer Is Well Directed Man Power

"Man power, well directed, is the answer. No make of electric refrigeration is well enough known to stand alone in the field. It must be supported by someone who believes in it and the company back of it. There never was a distributor or dealer who did not need to be encouraged and backboned. It is in most cases very necessary to teach a distributor how to merchandise your product, for it is new to him; it is also new to the masses.

"There must be more educational work done. The national advertising that has been done has helped a lot. Direct by mail and newspaper advertising has possibly done its share to familiarize the public. But still it requires man power to follow up.

"The piano, sewing machine and implement businesses are old. Yet manufacturers of these products have needed man power to bring them success. They still follow out the same idea, because competition has always been keen and they have always needed men to preach their product to the dealer and to assist the dealer and distributor in getting the business.

"You would hardly expect to do a national business in a few years with a product that is only a few years old and not any better known than electric refrigeration, and make an outstanding success of it.

"There will be lots of money made in this business by the manufacturer who builds a good unit and holds steady, and decides on a definite plan of sales procedure, and then works the plan with intelligent man power," concludes our reader.

ICELESS COOLER TO USE PLYMETL CONSTRUCTION

Announcement has been made that the Iceless Cooler Corp., of Chicago, manufacturers of patented Revolvo and standard ice cream cabinets and fountainettes, have concluded arrangements with the Plymetl Refrigerator Co. for the use of Plymetl shells and monolithic cork construction in their cabinets.

This construction will result in saving in weight and in heat leakage, it is claimed, as well as in the cost of trimming. The tops of both cabinets and fountainettes will be made of white rubber cemented to the Vapo metal outer casing of the Plyemtl. The sides and bottom will be finished in aluminum spar varnish over the Vapo metal covering.

Wisconsin Furniture Dealer Will Discuss Refrigeration

One of the questions which will be discussed by the Wisconsin Furniture Dealers at their convention at the Republican House in Milwaukee, February 14 and 15, will be the question of whether or not furniture dealers can profitably handle electric refrigerators besides regular ice boxes.

Are Your Window Displays Paying Their Share of the Monthly Rent Bill?

A number of essential points in window display, that form of advertising which is so often neglected, appear in the December 3 issue of "On the Top," the magazine of the Refrigeration Department of the General Electric Co., Cleveland, Ohio.

Keep the glass clean. This is the first step toward attractive window decoration. Remember, nothing looks more uninviting to the passersby than a dirty, poorly kept window and store front.

Avoid cluttering the window. The G. E. Refrigerator should be the central figure in your window display. It will be more dominating if you are careful not to "overtrim" the window in such a way as to detract from the refrigerator display. With a few exceptions, the simple, dignified window is more attractive than the one which has too many points of interest.

Keep your windows well lighted. Many companies pay big money for illuminated billboard space. Your window, attractively trimmed and well lighted, is a high grade advertising medium. Keep it lighted as long as evening traffic past your store warrants. An entirely dark or poorly lighted window is no match for a competitor's window artistically illuminated.

Use of colored lighting effects. A number of beautiful effects can be obtained by using colored lights. It accentuates the whiteness of the refrigerator while the spotlight tends to direct attention instantly to it.

Don't let your display become monotonous. People become accustomed to seeing the same display week after week and in tiring of a window display they are quite apt to lose interest in the product shown therein. We suggest a frequent change—if nothing more than shifting the refrigerator from one end of the window to the other, or from the center to either side. Also vary the lighting and occasionally run in something of local interest, humorous or otherwise, which will invite comment and attract attention to your store and the product which you handle.

Money spent on your windows a good investment. If your windows are not particularly adapted to refrigerator display—it will be money well spent to have them remodeled to give the proper setting for your product.

Appoint someone in your organization to take care of this phase of display advertising. Let him have the material necessary to work up displays for your windows. The cost of this material is very slight compared to what you would have to pay for newspaper or billboard space, and the percentage of returns, figured on a basis of amount invested, is as great.

Jackson, Miss., Dealer Holds Winter Sales Meeting

The winter sales meeting of A. G. Riddick, Inc., local dealer for General Electric refrigerators in Jackson, Miss., was brought to a close on December 1 with a banquet at the Edwards Hotel. Approximately 125 members and friends of the organization were present. Short addresses were given by Mayor W. A. Scott and L. E. Foster, secretary of the Chamber of Commerce.

L. V. Sutton, manager of the Mississippi Power & Light Co., discussed the advantages of the electric refrigerator from the public utility standpoint. P. B. Zimmerman, representing the General Electric Co. home office, gave the historical background of the General Electric refrigerator. Following his address, a moving picture was shown of the manufacture and operation of the machine.

Louisville Distributor Has Architects and Business Men as Guests

Agents for Kentucky and southern Indiana of the Electrical Refrigeration Company, 327 West Broadway, Louisville, Ky., gathered to attend a banquet at the Brown hotel on Wednesday, November 30. Architects and business men interested in electric refrigeration were their guests at this dinner.

The Electrical Refrigeration Co. was recently organized as exclusive agents in Louisville for the General electric refrigerator.

Frigidaires Installed at Mooseheart

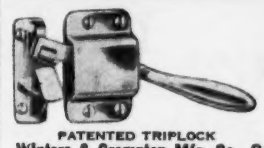
A total of 80 Frigidaire installations have recently been made for the Loyal Order of Moose in its model community maintained for orphans at Mooseheart, Illinois. The installation ranges from small cabinets in the cottages to a large commercial unit for cooling all of the milk consumed in the community. Installations have also been made in the hospital diet kitchen, the main hospital kitchen, and the medical dispensary. Water coolers and ice cube makers are also a part of the equipment.

Judson C. Burns, Philadelphia Distributor, Meets with Associate Dealers

Plans for 1928 were discussed by these General Electric men at a meeting in Philadelphia, November 30

In writing to advertisers please mention Electric Refrigeration News.

Copeland
DEPENDABLE
Electric
REFRIGERATION
630 Lycaste Avenue, Detroit, Michigan



Distinctive Refrigeration Hardware
PATENTED TRIPLOCK
Winters & Crampton Mfg. Co., Grand Rapids, Mich.

Write for prices of condenser coils formed to your specifications.
WOLVERINE TUBE COMPANY
WOLVERINE
SEAMLESS COPPER AND BRASS TUBING

"In the Heart of Cleveland"
AUDITORIUM
HOTEL

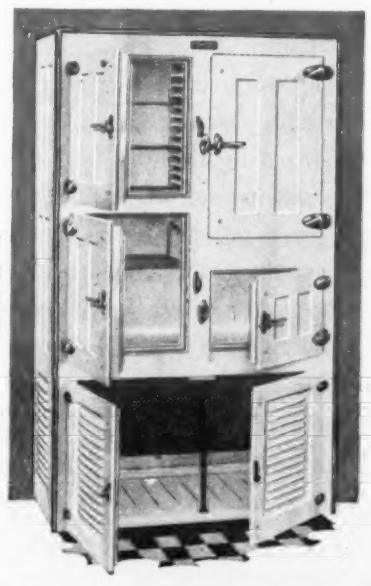
EAST 6TH AND ST. CLAIR AVE.

TO THE PUBLIC:
Are you wondering why we have built "Another" Hotel in Cleveland. One must have a good reason for spending nearly two million dollars. We have a reason worth far more than that.
Every hotel operator gives "His best efforts for your comfort." We have centered our efforts around one ideal desire, "To make you happy."
There must be something back of that desire. You can easily prove it by coming here just once.
GEORGE J. PAUL
MANAGING DIRECTOR

E. T. L. Service *for* Domestic and Commercial Electric Refrigeration
Testing and experimental laboratory service for *manufacturer, distributor, central station*
Test data exclusive property of client
ELECTRICAL TESTING LABORATORIES
80th Street and East End Avenue, NEW YORK CITY, N. Y.

BOHN SYPHON REFRIGERATORS

Beautiful, Distinctive. Can be had in 7, 9 and 12 cubic foot net food storage capacity.



White Porcelain Enamel inside and outside. The machine compartment is ideal for storage space where remote installation is made.

For Electric Refrigeration
Write for Full Particulars
Bohn Refrigerator Company
SAINT PAUL, MINNESOTA
These Models are on Display at our own Stores in
NEW YORK 5 E. 46th St.
CHICAGO 227 No. Michigan Blvd.
BOSTON 707-709 Boylston St.

ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Electric Refrigeration Industry

PUBLISHED EVERY TWO WEEKS BY

BUSINESS NEWS PUBLISHING CO.

554 Maccabees Building, Woodward Avenue and Putnam Street
Detroit, Michigan. Telephones: Northway 4243-4244

Subscription price: $1.25 per year; two years for $2.00
Foreign Countries: $1.50 per year. Advertising Rates on Request

F. M. COCKRELL, *Editor and Publisher* H. A. DELASHMUTT, *Advertising Manager*
HUGH J. MOORE, *Assistant Editor* BEULAH WERTZ, *Circulation Manager*

Copyright 1927 by Business News Publishing Co.

DECEMBER 21, 1927

Looking Ahead

The "Catalogue and Directory Number" of the NEWS to be issued January 4, is being designed to meet an immediate need of the industry. The rapid development of the field, the changes and improvements in design, the new applications and special devices which have been placed on the market recently, all emphasize the desirability of presenting, in one publication, the most complete and comprehensive collection of data which can possibly be secured. Manufacturers of machines, cabinets, accessories and materials have been invited to co-operate in making this presentation. Bulletins have been distributed requesting summaries of outstanding achievements during the past year, reports on plans for market development or expansion of operations, detailed specifications covering all sizes and types of products manufactured, together with revised lists of company officers and departmental executives. The "Catalogue and Directory Number" will, we hope, be a valuable contribution to the information files of manufacturers, distributors, dealers, central stations, engineers, architects and all others interested in the subject.

Coming Issues

In each of the last several issues, editorial material has been selected with a view to focusing attention upon some special field for the distribution of electric refrigeration equipment to the public. Department stores, electric light and power companies, radio dealers, hardware and furniture stores have each been treated in terms of actual experience in the sale of household machines. This concentration of attention upon possible distributing outlets has been helpful in bringing out the natural advantages as well as the special problems of each trade channel.

As a part of the plan, a considerable number of copies have been mailed to selected lists of important concerns in each trade group. Returns, in the form of letters and subscriptions, indicate that these efforts have aroused much interest among retailers who see new possibilities of serving their customers by the addition of an electric refrigerator department.

During the coming year the program will be extended to include other trade groups, such as oil burner dealers, electrical, heating and pluming contractors, and various types of specialty shops. This promotion plan is based upon the realization that the industry needs, and must have, thousands of new sales outlets in order to bring the service of electric refrigeration in its varied forms before the buying public. It is obvious that no one kind or type of dealer will fit the needs of all communities. Distributors, dealers, salesmen, service and installation specialists must be recruited from many fields. Electric refrigeration represents an opportunity of such magnitude that it will unquestionably attract the most aggressive and forward-looking men and women to its ranks.

Application Studies

In addition to the discussion of distribution problems, as outlined above, special attention will be given to the various applications of electric refrigeration. Each issue will be devoted to a particular type of equipment. For example, water coolers, ice cream cabinets, soda fountains, store display cases and other specialized applications will each be treated in turn. In the same manner the problems and possibilities in marketing equipment to hotels and restaurants, butchers and grocers, florists and other prospective purchasers common to every community, will be analyzed and discussed. No effort will be spared to present to the industry all valuable facts and figures, experience and opinion which will assist in developing the market efficiently and profitably.

The NEWS will also expand its editorial service in the direction of studies of the parts and materials which enter into the construction of the finished product. Motors and compressors, condensers and tanks, insulation and finish, hardware and trim, chemicals and lubricants in all their varied forms will be given consideration in this broad educational program.

The NEWS looks forward to a period of most interesting activity in providing a service which, we believe, will be highly valuable to the electric refrigeration industry.

Merry Christmas, Happy New Year

Electro-Kold and Seeger Featured in Salem, Oregon, Furniture Store Fair Booth

The C. S. Hamilton Furniture Co. devoted approximately half of its display at the Oregon State Fair at Salem, to Seegar Cabinets and Electro-Kold electric refrigerators. Dealer helps supplied by the manufacturers are well placed and add to the "pull" of the booth.

APPLICATIONS OF CARBON DIOXIDE ICE EXPLAINED

(*Continued from Page 1, Column 4*)

driven off when limestone or marble is reduced to lime. It is a colorless, odorless gas, having the pleasing taste familiar in carbonated water. It is about 1½ times as heavy as air, volume for volume, if the pressure of the air and gas are the same. It is not inflammable and does not support combustion—in fact, it is an excellent fire extinguisher.

This gas, when compressed to about 1,000 pounds per square inch, and at temperature of about 80° F., liquefies. This is the liquid that is shipped in steel cylinders and is used for carbonating soft drinks. If one of these cylinders is inverted and quickly opened, the liquid rapidly expands. Some of it evaporates, and, in doing so, absorbs so much heat that a portion freezes to a snowy, white solid, carbon dioxide snow.

In the commercial manufacture of solid carbonic, liquefied CO_2, is allowed to expand through a patented nozzle into large tanks to conserve the gas, and the snow produced is hydraulically compressed into hard blocks before being exposed to the air, forming solid carbonic.

Solid carbonic is snowy white, not transparent like ordinary ice. It weighs about 80 pounds to the cubic foot, and has a temperature of 114° F. below zero (146° colder than water ice). Each pound of solid carbonic produces about 9 cubic feet of gas when warmed into ordinary room temperature. The amount of refrigeration available from it depends on the extent to which the use is made of the refrigeration in the gas. The following table shows the number of B. T. U. absorbed, the gas being warmed to the temperature indicated.

Final Temperatures of Gas F.	B. T. U. per Lb.
10	249
0	256
20	267
32	274
75	346

Solid carbonic, therefore, contains roughly twice as much refrigeration, pound for pound, as ordinary ice, which absorbs 144 B. T. U. per pound at 32° F.

Far More Effective Than Water Ice

To use solid carbonic it is essential, however, that we bear in mind that its properties are different in many ways from ordinary water ice. The gas formed from solid carbonic, being heavier than air, quickly sinks and if in a container will fill the container and overflow the top as if it were an invisible liquid. Since a pound of solid carbonic produces 9 cubic feet of gas, means of escape must be left for the gas. Such means are always present in ordinary insulated shipping containers, balsa wood shipping boxes and corrugated paper containers. The cold generated gas, however, forces out the warm air before it and prevents the access of more warm air. This pushing out of warm air before it very effectually keeps the container cold, because the only way the inside of the container can be warmed is by actual conduction of heat through the walls and through the cold gas itself, which is slowly coming out of the container. Ordinary water ice, if used, turns to water, does not increase in volume and runs out, allowing warm air to enter. The expanding property of solid carbonic serves to make it from *15 to 20 times as effective as ordinary ice*, at the same time guaranteeing a clean, dry package. If the solid carbonic is so packed that it surrounds itself with cold gas, its rate of evaporation is slowed up materially and it lasts much longer.

There is no adverse effect of the cold gas on ice cream, meat, fish, etc. In fact, frozen fish has been kept in an atmosphere of cold carbon dioxide for six months without the slightest effect whatever. Excluding oxygen as it does, the gas retards the growth of ordinary bacteria and has a mild antiseptic effect.

Several of the largest and most prominent ice cream manufacturers, caterers, fish companies and meat packers are using solidified carbon dioxide for shipping purposes. Numerous tests have demonstrated to these firms the advantages of using carbon dioxide ice as a means to extend their markets tremendously.

(*Continued on Page 5, Column 2*)

NEXT MOTOR MEETING IN CHICAGO, JAN. 17

The next meeting of the joint committee on fractional horsepower motors is to be held at the Palmer House, Chicago, 10 A. M., Tuesday, January 17, according to a notice issued by L. W. W. Morrow, chairman, which says:

"At the request of the Washing Machine Manufacturers' Association the January 6 meeting has been postponed until January 17. On January 18 the Washing Machine Association meets in Chicago and the officers urge that our meeting be held at that approximate date. They believe this meeting will get a full attendance.

"The purpose of the meeting will be to have a discussion of locked rotor current values and starting current values on fractional horsepower motors used in washing machines, ironing machines and dish-washers. A plan will be formulated for presentation to the full joint committee and it is hoped that the committee work will shortly be concluded upon receipt of this plan. I hope you can be present or can send a representative."

SAN ANTONIO FRIGIDAIRE MEN GET $3,502.02 IN PRIZES

Prizes totalling $3,502.20 have been distributed among San Antonio, Texas, salesmen and supervisors of the Frigidaire Corp., by E. J. Hermann, branch manager, as the result of a sales contest during 11 weeks in which the San Antonio salesmen were matched with those of Houston.

E. L. Kellner won the first prize for supervisors of $250; A. W. Kilgore, second; F. R. Reynolds, third; H. F. Shaper won first prize for salesman, $250; L. G. McGinty, second; J. R. Osborne, third; R. W. Azmann, fourth.

Mr. Hermann presented the prizes at a banquet given at the Alamo Club for the San Antonio organization.

In attendance were George F. Jones, Jr., regional sales manager from the factory at Dayton, Ohio, and F. C. Marshall, factory zone supervisor.

SWOPE ESTABLISHES LOAN FUND FOR UNION COLLEGE STUDENTS

Available for G. E. Employees and Their Sons

The establishment of a loan fund of $25,000, the gift of Gerard Swope, president of the General Electric Company, has been announced by President Charles Alexander Richmond of Union College. Under the provisions of the gift, loans are to be awarded to employees or sons of employees of the General Electric Company and International General Electric Company in the United States and to other students of Union of not less than one year residence at the college. The loans, which are to be made from the income of the fund, are to be awarded in the order of preference given above.

In making his gift, Mr. Swope stipulates that applicants for loans shall be considered not only from the standpoint of academic attainments and their financial needs, but also from the standpoint of character, and by contact and oral examination, their personal qualifications for deriving the greatest good from a continuation of their studies.

Simultaneously with this announcement, President Swope today made known that the board of directors of the General Electric Company has also set aside $25,000 to be used as a loan fund for the education of employees or sons of employees of the General Electric Company, but with no restrictions on them as to the college they may wish to attend.

Provision is made under both funds that the recipient shall understand that if in after years he is in a position to do so, he is to repay the amount so loaned to him, with our without interest. Such money as may be repaid shall be treated as a revolving fund and shall be again loaned under the same provisions.

RECEIVER APPOINTED FOR ROBBINS & MEYERS COMPANY

Wilbur J. Meyers, who has been appointed receiver for the Robbins & Meyers Co., Springfield, Ohio, following an application for receivership made after a meeting of the board of directors, has made the following statement:

"For some time plans for reorganization of the Robbins & Meyers Co. have been considered and as a part of any reorganization a receivership is necessary. It is hoped that the receivership of the company will be ultimately helpful rather than hurtful to the business of the company. The company's fixed charges for bond and other interest have been too heavy for its resources. Its good will and trade have been extensive, and we hope they will continue and that a reorganization may develop. The company owes no money in Springfield, the creditors being outside banks and firms. All payroll checks will be paid. It is hoped that creditors and security holders will work together for a favorable outcome and the employees and staff of the company can be counted on to give their best efforts to that end."

"We have found ELECTRIC REFRIGERATION NEWS extremely interesting and useful."—J. M. Beauchamp, director and secretary, British Electrical Development Association, Inc., London, England.

SALES FLOOR MAN SELLS ONE OUT OF TEN PROSPECTS

Floor Man Closes Many Sales for Outside Men

By Willis Parker.

"What chance has the man on the sales floor to sell electric refrigerators to persons who have never been approached on the subject?"

This was the question I put to R. K. Huber, floor man at the Denver branch of the Frigidaire Corporation. I had been led to believe that practically all persons who visited the salesroom of an electric refrigerator dealer had previously been contacted by salesmen and therefore were making the visit at the suggestion of the salesman that they might investigate the various models on display. If this were true and sales were made by the floor salesman, the outside salesmen would receive the credit and therefore the commission on the sale.

"Out of 125 to 150 persons who come into the salesroom to look at electric refrigerators there are 20 to 25 who have never been called on by our salesmen," Mr. Huber asserted. This means that about 12 per cent of the visitors are absolutely new prospects. "Out of those who never have been called upon, the floor man has an opportunity to sell 11 per cent," Mr. Huber continued.

Floor Man Sells One Out of Ten Visitors

This means that he can sell about one out of every ten of the new prospects. This is not such a bad record after all, considering the fact that the primary purpose of having a man on the floor is to take care of the prospects which the salesmen ask to drop in and look at the appliances and inspect the various models. Perhaps the arguments offered by the floor salesman will clinch the deal then and there, thus saving the outside salesman further effort. The commission goes to the outside salesman, however.

Mr. Huber's experience has uncovered many pecularities of human nature. Some of the visitors stretch the truth to a remarkable degree, for various and sundry reasons, which, to the salesman appear unreasonable.

"There are many visitors who claim they never have been called upon by one of our salesmen, whereas they have, as a matter of fact. We presume that they didn't like the outside man, and, while they desired to invest in one of our refrigerating systems, they wanted to buy it from the office direct in hopes that the outside man would not get the commission.

"There are others who decline to sign the order after a visit for the reason that they fear the outside man won't get credit for the sale. It is hard to convince some of them that we'll credit the salesman just the same.

Watches the License Numbers

"Then there are others who declare they have never been approached by one of our salesmen, and, in an effort to prove the assertion, declare they do not live in Denver; but they do. I usually watch the automobile in which such visitors leave. I get the license number and from consulting the records of automobile license owners ascertain the name and address.

"Some will not give us their names, probably suspecting, and rightly, too, that we will give the name to our outside salesmen for follow up sales efforts. I get them quite frequently through the license numbers on their automobiles.

"I figure that every person who comes into our salesroom is interested in an electric refrigerator and therefore is a live prospect. Some, of course, have been approached on the subject, others haven't, but regardless of who they may be, I endeavor to make the sale just as if I were on the outside calling upon prospects.

Gets Advance Dope On Visitors

"The salesmen often advise me that Mr. and Mrs. So-and-So are coming in at a certain time to look at the line. I try to get such a good description of the prospective visitors that I can identify them when they come in. The salesman, too, has given me the history of the case so I will know just where to begin and how to handle the prospect. Sometimes, when I am absolutely positive in my identification, and even have the visitor's name, he or she will deny ever having talked with the salesman.

"When a visitor comes in, I endeavor to find out from him whether he has ever considered one of our refrigerators and whether or not one of our men has called upon him. If it appears to be an entirely new prospect, I seek to learn how many are in the family, then show them a refrigerator that should be the right size for that family.

"The most important thing, however, is to obtain the name and address of the visitor. We may reasonably expect he is a hot prospect and therefore should be followed up immediately by the outside sales force."

FISKE APPOINTED A. S. R. E. SECRETARY

David L. Fiske

The Council of The American Society of Refrigerating Engineers held its first meeting under the administration of president G. B. Bright on December 7, 1927, appointing David L. Fiske as secretary for the coming year. Mr. Fiske has been associated with the A. S. R. E. during the past year as editor of *Refrigerating Engineering*.

Mr. Fiske's experience with the refrigeration field has been mainly confined to research. He was connected with the Engineering Experiment Station of the University of Illinois as research man for two years in refrigeration and for three in railway mechanical engineering. His practical experience with refrigeration included two years' service with Wilson & Company, packers, in Cedar Rapids, Ia., as draftsman, as well as testing and erecting work with the McClellan Refrigerating Co. of Chicago.

Mr. Fiske is a graduate of the Massachusetts Institute of Technology, class of 1920 in mechanical engineering. At the University of Illinois he completed two years of graduate study in thermodynamics. He is the author of the present tables of SO_2 properties and a number of technical and literary magazine articles. His fraternity is Delta Upsilon. He is an active member of Sigma Xi and a first lieutenant in the Officers' Reserve Corps, United States Army. He was born June 19, 1898.

APPLICATIONS OF CARBON DIOXIDE ICE EXPLAINED

(*Continued from Page 4, Column 4*)

Some Important Advantages

The advantages of solid carbonic over the old method of ice and salt for refrigeration are numerous, but below are listed some of the most important.

Shipping and Delivery—Almost unlimited shipping radius with solid carbonic without re-icing. Increased working capacity of delivery equipment. Collections of empty tubs, cans, etc., reduced to a minimum.

Packing and Shipping Charges—Perishables (ice cream, flowers, fish, meats, fruit, etc.) may be packed earlier and shipments grouped when solid carbonic is used—no re-icing necessary. Tremendous weight and space is saved in shipping with resultant large savings in shipping charges. For example: A 5 gallon can of ice cream packed in solid carbonic in an iceless jacket or balsa wood box weighs fifty pounds against 125-150 pounds when packed in salt and ice. This saving in weight and bulk may be applied in shipping of butter, fish, meats, etc.

Sanitation—Clean, dry workrooms, platforms and delivery equipment. No sloppy mess in shipping containers. No inconvenient wet packages or tub in the house of the consumer. Solid carbonic is absolutely dry. The temperature is even and fixed.

Equipment—Solid carbonic eliminates necessity for excessive depreciation of expensive equipment. Truck bodies and chassis are not damaged by it as is the case with salt and ice. Wooden and metal containers containing solid carbonic are not damaged by brine. In a great many cases light, paper, non-returnable containers, may be used with solid carbonic instead of the clumsy, heavy containers necessary with salt and ice packing.

Several manufacturers have eliminated numbers of their heavy delivery trucks and have substituted motorcycles with balsa wood side car containers which deliver small orders to homes, dealers and restaurants, faster and more economically.

Special bodies for trucks have been perfected and save practically all the space formerly used for salt and ice, thus permitting greater carrying capacity.

Carloads of fish filled to the top of the car have been sent from New York to Kansas City taking six days for the trip without re-icing and using only 1,500 pounds of carbon dioxide ice.

Concrete Data—In the transportation of ice cream between New York and Philadelphia, experience has shown that 200 pounds of solid carbon dioxide replaces 3,000 pounds of water ice and 600 pounds of salt, an efficiency ratio of 15 to 1. In the shipment of frozen fish from New York to Detroit, 17,000 pounds of water ice and 10 per cent of that weight of salt are ordinarily consumed per car, whereas the same quantity of fish may be shipped over the same route in a frozen condition with the use of only 1,200 pounds of solid carbon dioxide, and furthermore, the carbon dioxide is all loaded at the beginning of the trip and does not require frequent replenishment.

The saving effected by the use of so convenient a refrigerant is evident from the fact that single charges of carbon dioxide have maintained perfect refrigeration in a car over a journey ordinarily requiring many re-icings.

Not only is there a saving in actual refrigerant used but ordinary practice with water ice requires that the car be taken off service approximately 20 per cent of the time of a journey for re-icing.

The large amount of water ice required by a car adds to the weight of non-paying freight and reduces the space available for pay freight. The very low temperature of solid carbon dioxide and the factor of safety which this introduces into refrigeration make it possible for a car to carry as much as 50 per cent more perishable freight than its present accustomed load.

The evaporation of carbon dioxide to a dry gas not only makes feasible its use in paper or cardboard containers for small-lot shipments without the necessity of the return of empty tubs or barrels, but for carload freight it also reduces the maintenance cost on refrigerator car equipment. The depreciation of refrigerator cars in service is very rapid, largely because of the moist cold supplied by water ice and the brine drippings from ice bunkers which must be cared for. There is also he possibility that drip pipes may become clogged and water collect around the cargo, resulting in serious damage.

an unusual Opportunity now open to distributors

EXCLUSIVE TERRITORY for

ARCO WAND

HEAVY DUTY

POSITIVE VACUUM CLEANER

THIS improved portable vacuum cleaner offers these exceptional advantages:

Presents no servicing problems. No increase in your present overhead. Fills in gaps between selling seasons. Gives unusual profit in proportion to sales effort. A stable proposition—a product of the American Radiator Company.

Here are some of its unique sales features. It takes out 100% more dirt than ordinary vacuum cleaners. Does its work in half the time. Consumes less current per square foot. Equipped for every kind of surface—rugs, draperies, upholstery, walls, floors. It is compact, quiet, 99.5% efficient. Saves labor—saves rugs—saves repair bills.

To get the exclusive distribution in your territory—write or wire us for particulars.

ARCO VACUUM CORPORATION

(DIVISION OF AMERICAN RADIATOR COMPANY)

40 WEST 40TH STREET, NEW YORK

Rex
THE COMPLETE LINE OF ELECTRICAL REFRIGERATION CABINETS
APARTMENT HOTEL
Models No. 102 and 105
Designed for remote compressor installations and where vegetable bin is desired. Write for specification folder.
The vegetable bin provides a convenient and sanitary storage space for foods not requiring the low temperature of the upper compartment.

A Design and Finish ... to Meet Every Installation Demand

REX CABINETS are a new conception of beauty, convenience, space saving and installation economy. Their beauty is clearly illustrated in their variety of colors which are adaptable to any interior color scheme. ¶ Their flexibility provides several combinations to fit exactly where and as desired. Either with self-contained units—remote installations—with vegetable bin—with detached compressor compartment under the sink or above cupboard ... Rex Cabinets—specified without hesitancy.

Rex

REX MANUFACTURING CO.

CONNERSVILLE, IND., U.S.A.

FINE METAL CABINETS FOR ELECTRICAL REFRIGERATION

We will install and put into successful operation a complete porcelain enameling plant for porcelain enameling your refrigerator linings and parts at a reasonable price.

Write for estimate.

The Ferro Enamel Supply Co.
CLEVELAND, OHIO

WAGNER MOTORS FOR ELECTRIC REFRIGERATION

Wagner Small Motors meet the refrigeration standard—mechanically quiet—built to close tolerances. Available in ratings from ⅓-hp. to 1½-hp.

TEN PROMINENT USERS

Frigidaire Corp.	U. S. Air Compressor Co.
Kelvinator Corp.	Duro Pump Co.
Universal Cooler	W. B. Wilde Co.
Iron Mountain Co.	Lipman Refrigeration Co.
Merchant & Evans	American Blower Co.

WAGNER ELECTRIC CORPORATION
6400 Plymouth Avenue St. Louis U. S. A.

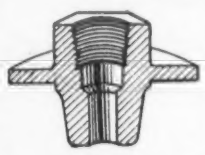
BRINE TANKS—"AIR WAY" CONDENSERS
EXPANSION VALVES
LIQUID FILTERS

For Electric Refrigeration—Write Today

Fedders Mfg. Co.
Buffalo, New York

Factory Representatives:
F. B. Riley and Associates, 320 Beaubien St., Detroit

HOT DIE PRESSED FORGINGS



Valve bodies, tees, elbows, evaporator headers—anything in the line of brass parts made to your specifications. Rough forgings only. The largest producers of refrigerator forgings in the country.

Send your applications direct to

ROME MFG. COMPANY, Rome N. Y

Factory Representatives:
F. B. Riley and Asssciates, 320 Beaubien St., Detroit

BUSH CONDENSERS

Made in any size or capacity. Seamless Copper Tubes, Individual Fins, Maximum Efficiency.

BUSH MFG. CO.
Hartford, - - Conn.

WHITE-HANNA
302 Lincoln Bldg.,
DETROIT, · MICHIGAN

NORTHEY
REFRIGERATORS
FOR ALL PURPOSES
ANY SIZE, STYLE OR FINISH
NORTHEY MFG. CO.
WATERLOO, IOWA
AGENCIES IN MOST LARGE CITIES
WATERLOO DIRECT TO YOU

PETERSON SPRING COMPANY

Spring Makers

1662-1664 Beard Avenue
DETROIT, MICHIGAN

KEROTEST

FORGED BRASS VALVES
for Mechanical Refrigeration

Quality Shut-off and Cylinder valves in any standard designs or to your specifications.

KEROTEST MANUFACTURING CO.
2525 LIBERTY AVENUE
PITTSBURGH, PENNA.

WESTERN DEALER DESCRIBES HIS SELLING METHODS

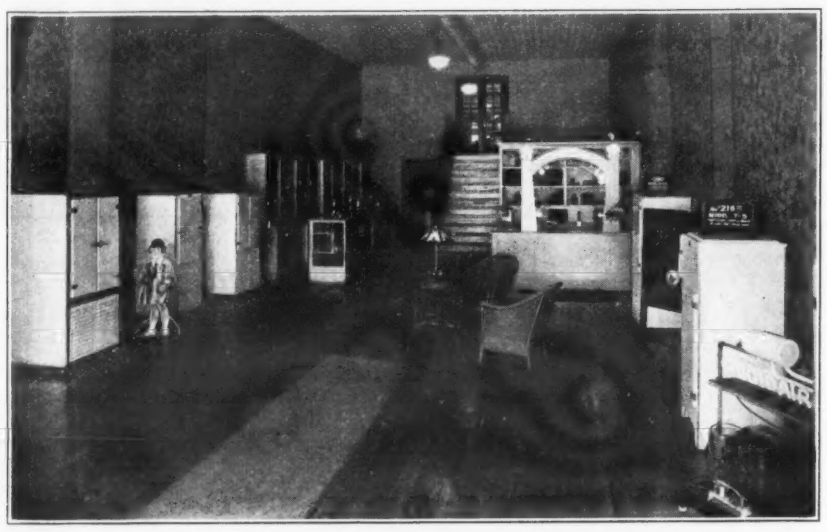
Says Competition Helps Break Down Sales Resistance

By John Girdler

Ashcraft Electric, Inc., is located at 410 Santa Fe Avenue, Pueblo, Colorado. Harry C. Ashcraft and his father have been specializing in Frigidaire and Delco Light since 1918, though the shop, as an electric shop, is much older. Harry C. Ashcraft thinks in terms of electric refrigeration. He is an enthusiast.

"Competition is not an important consideration," says Mr. Ashcraft. "The field of electric refrigeration is so new that we feel that every sale our competitor makes helps that much in educating the public to the advantages of the new and sanitary way of keeping foodstuffs. The housewife may point to the refrigerator of a competitor with pride and show its merits to her neighbor. Her neighbor will be in a much more receptive frame of mind to hear what our representative has to say about Frigidaire. We are finding the road easier the farther we go.

"Look at the matter in this way, if you will. If automobiles were unknown it would be difficult to interest a man in an investment of one or two thousand dollars on the strength of what an automotive truck might do for his business. Just consider the advantage we have. Everyone knows that food will keep better if it is cold. Everybody knows that electric refrigeration is an assured fact. Everybody knows that the cost is relatively low and it is easy to demonstrate, with positive figures, that a refrigeration plant of modern type is economical.



Don't Hide the Order Blank

"A large part of the possible sales resistance in any territory is overcome by the company we represent. It advertises freely. We believe that its prices are right and that its sales methods are right. For example, the chart that the Frigidaire people put into the hands of salesmen is prepared on the right principle. The very first thing in this chart, which is used for canvassing, is the order blank. We do not fly any false colors. It is apparent to the prospect at once that our purpose is to sell. After a glance at the order blank the salesman goes on to the advantages of electric refrigeration, and if any resistance has been developed by the sight of the order blank it is eliminated later by the very apparent benefits that come from owning an electric refrigerator.

"For our particular territory," Mr. Ashcraft continued, "we have worked out a suggested demonstration approach. Our salesman states his business and advises the housewife that his company is making a survey of the district. He mentions the low cost of electric refrigeration and calls attention to the fact that it may not be necessary to take out the old ice box but merely to install a frost coil. He gives the prospect a descriptive pamphlet, extends an invitation to visit our sales room and asks for the permission to have a representative call to explain the matter further.

Salesmen Cold Canvass Half the Time

"Our work is mostly in the city of Pueblo. Fifteen to eighteen per cent is suburban. We have divided the city into five zones. We try to make each zone a sort of average city. Pueblo used to be three separate towns, and quite naturally there is some difference in the residents of the different sections. We keep six salesmen busy in the city. Five of these work in the five different zones, and the sixth man is concerned with nothing but commercial refrigeration. The five men who work in the zones spend half the time in straight house-to-house canvassing. The other half the time is spent in closing deals. No effort is made to sell during the canvass. In the later interview the matter is taken up as thoroughly as we know how.

"Our salesmen know enough, or should know enough, after they have seen the size and type of ice box used in a home, to know, pretty accurately at least, the size and type of Frigidaire that would best suit the needs of the family. The size of the family would have something to do with the consideration, as would also the amount of entertaining that is done and a thousand and one little factors that enter the sales problem. Our salesmen then put all of their weight on the type of plant that is best suited to the particular family. Showing details about a great many other boxes only leads to confusion. It is not necessary for a salesman to have engineering ability. Personally, I prefer that he should not have such ability. All specifications are drawn in the office, and we might run into difficulties with technical men. They can learn all that they need to know about electric refrigeration from us.

Husband and Wife Must Both be Sold

"There is a good deal of humorous talk about women doing all the buying in these times," said Mr. Ashcraft. "I should say that it is a fifty-fifty proposition in buying electric refrigerators. There are times when a husband is 'sold' on the idea and will buy an electric refrigerator as a present for a wife who may not want to invest the money in just that way. We think that it is an investment when a customer buys one of our machines. The dividends are the savings. As a usual thing, the idea is first suggested to the wife. She rarely closes the deal. The investment is large enough that she wants to go into conference with her husband. She wants the husband to have the same demonstration of the advantages of the machine that she has had. She does not relish the thought of misunderstandings in the future. As a consequence, practically all sales are closed in the evening, when the wife, the husband and the representative are all present.

"The work of our commercial salesman is somewhat more specialized than is the work of our zone salesmen. Practically every meat dealer now knows the advantages of the lower temperatures that electric refrigeration make possible. All of them know how costly the upkeep of an icebox is. Ice cream dealers know that nothing can compare with our method. Candy makers now have an easy way to keep their products in perfect condition. Our commercial salesman can talk figures to business men, who must know figures or go out of business. The very sightliness of a refrigeration coil, covered with frost, is a help in selling candy.

"Dude Ranches" Good Prospects

"Wealthy ranchers are taking up electric refrigeration slowly. However, one good source of prospects for us is the 'dude ranch.' These are large reaches of wilderness, where society men and women come for a 'let down.' Here they can ride to their hearts' content, either in machines or on horseback. These ranches have all of the comforts of home, for most of them have their own lighting, heating, water and refrigeration plants. The class of people to whom they are catering must have the best, so that electric refrigeration finds a place here.

"The electric refrigeration business is new—it is growing—it has a wonderful future," concluded Mr. Ashcraft.

Must Read the News to Keep Posted

Kelvinator Chicago Co.
Michigan at Randolph
Chicago, Ill.,
December 5, 1927.

ELECTRIC REFRIGERATION NEWS,
Detroit, Michigan.
Gentlemen:

I have been to date actively engaged in the refrigerating business for 19 years and must admit that during that time there has never been a publication come to life that has taken such a foothold of the entire industry as ELECTRIC REFRIGERATION NEWS.

You have, with the publication of your paper, filled the demand for a medium that has captivated since its start the interest of all refrigerating men, no matter what refrigerant they use, to such an extent that they simply must read your paper now—*nolens volens*—to keep posted.

I am referring to it right along during the transaction of my duties and have it for reference on my desk all the time.

Yours very truly,

KELVINATOR CHICAGO COMPANY.
WM. H. SCHLADITZ, Mgr.
Commercial Department.

TWO BLACK CROWS TAKE TEMPERATURES

(*Apologies to Moran and Mack*)

1st Black Crow: Hy, big boy, where at you get them tongs?

2nd Black Crow: From a ice company—they let me have them. They said it would help in my business.

1st: Wh-whut you tryin' to do? Be a Red Grange or somethin'?

2nd: Oh, no, no. No. No-ooo. Ah just rides around all day, and drops a chunk here, and a chunk there.

1st: Doggone, you kin have your ole job. I gets enough ice in the winter time just goin' to the front door.

2nd: Well, you see, ah goes to the back door.

1st: Which back door?

2nd: Why, *any* back door.

1st: Ah know, but why?

2nd: Because people want ice, thas why.

1st: What people?

2nd: People that ain't got none.

1st: Oh yes, ah didn't thought of that. . . . But supposin' they did have some? You wouldn't give them ice then, you wouldn' do that.

2nd: Course I wouldn'. I'd wait until what they had melted, than I'd deliver them so more.

1st: H-hhow'd you know when it melted? How'd you know that?

2nd: They'd tell me, thas all.

1st: Perhaps your right. Ah hadn't thought of that.

2nd: Doggone, Amos, sometimes I think you're so dumb that—

1st: Neva mind. I ain't dumb enough to take a ice man's job. I been readin' where ice men are gointa all be outa work.

2nd: Boy, you been readin' the wrong kind of fiction.

1st: No, ah ain't. You ever hear tell of these here iceless refrigerators? Oh, they are *so* col-l-l-d!

2nd: How could a thing be a refrigerator without any ice in it?

1st: But they *is* ice in it.

2nd: Well, how is it iceless then? what *causes* that?

1st: There are pipes in it like a still and you turn on the 'lectricity and pretty soon you have ice. Jes press the button, thas all. It is *so* simple.

2nd: You mean it *makes* ice?

1st: Yes, it knows *how*.

2nd: How does it know how?

1st: Ah doan know. It's jes one of those things.

2nd: Even so, I'll bet it ain't as good as my ice? My ice is so cold they have to put it in steam heated ice boxes to keep the cook from gittin' pneumonia every time she opens the 'frigerator door.

1st: Boy, that ain't nothin'. These 'lectric refrigerators is so frigid that they have to keep the kitchen windows open in the winter time in order to let some warm air in!

Frigidaire Dealers and Salesmen Meet in Atlanta

The final meeting for 1927 of all Frigidaire and Delco-Light dealers and salesmen of the state of Georgia was held in Atlanta on November 26. E. H. Danforth, manager of the Atlanta branch, reported that as a result of excellent business during the past year Georgia ranks as fifth state in the national sales contest. Charles Allen, supervisor, brought out the necessity for proper refrigeration in winter, backing his remarks by quoting government figures. James Janean, installation and service manager; W. E. Hudson, of the Northeast division; W. W. Baird, of the Southwest division; L. W. Akin, of the Northwest division, and R. A. Rogar, of the Southeast division, each made a brief talk.

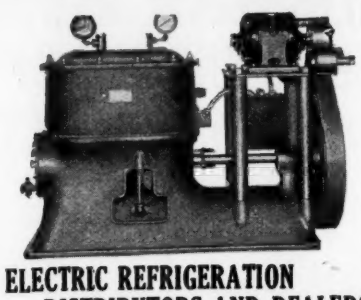
General Electric In New Home at Lawrence, Mass.

The Eastern Service Co., Lawrence, Mass., displayed the complete line of General Electric refrigerators at the opening of its new store at 47 East Merrimack St. on November 26. The store is under the management of John J. Wholey, who for several years was connected with the Lowell Gas Light Co., and who has been employed more recently as sales supervisor for the Lynn Gas and Electric Co.

C. E. Pritchard is president of the Eastern Service Co., which holds the wholesale rights for Lowell and Essex counties on General Electric refrigerators.

Copeland Appoints Dallas Distributor

The Phil H. Pierce Co., Inc., 1805 Commerce St., Dallas, Texas, has been appointed distributor for Copeland in 18 counties in north Texas and as retail dealers in Dallas. Mr. Pierce has recently attended the factory service school in Detroit. H. B. Monaghan will be in charge of the new refrigeration department.



ELECTRIC REFRIGERATION DISTRIBUTORS AND DEALERS

You need the PEERLESS line of commercial units.

PEERLESS units give you a COMPLETE line, ranging from 1 to 10 tons.

Fifteen years of successful manufacturing and merchandising of ice machines are behind the PEERLESS name. Our record warrants your most exacting investigation.

WRITE OR WIRE

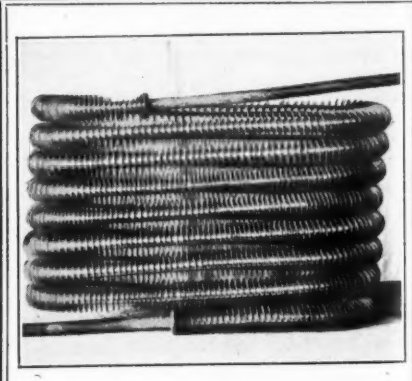
PEERLESS ICE MACHINE CO.
515 W. 35th St.
CHICAGO, ILL.

NOVOID CORKBOARD
Insulation

For all commercial jobs you will find NOVOID Corkboard Insulation the most satisfactory insulating material for the purpose. It is convenient to use. It comes in 12″ x 36″ and 24″ x 36″ sheets, in 1″, 1½″, 2″, 3″, and 4″ thicknesses. Shipped in strong fibre containers, each containing 72 board feet. Samples on request.

Write for Catalog E

Cork Import Corporation
345-349 West 40th Street
NEW YORK
Branches in Principal Cities



ROME CONDENSERS

are formed in any shape of one piece of seamless copper tubing, fitted with heavy gauge copper radiating fin. Rome condensers are five times as efficient as plain tubes

Rome-Turney Radiator Company
ROME, N. Y.

FLINTLOCK CONDENSERS

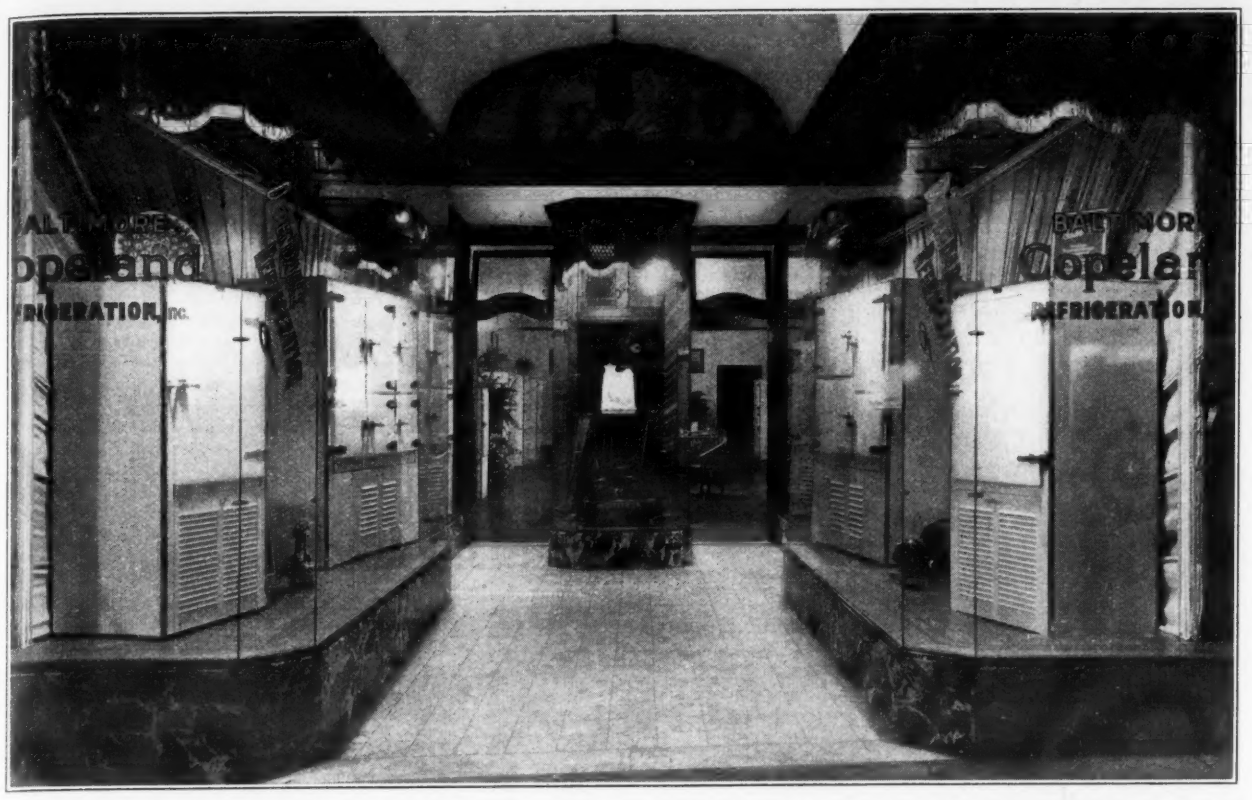
Efficient—Economical
Compact

Greater Efficiency at Less Cost

WRITE FOR OUR BOOKLET

FLINTLOCK CORPORATION
4461 W. Jefferson Ave.
DETROIT, - - MICH.

Headquarters of Baltimore Copeland Refrigeration, Inc., Permits Pleasing Display of Cabinets



This well designed store front invites Baltimore people to step inside and learn more about Copeland dependable refrigeration. This type of store front makes entrance to the display room particularly easy.

Eighteen units were sold in one week from this exhibit of Copeland models by Baltimore Copeland Refrigeration, Inc., at the Annual Food Show in Baltimore, Md. Approximately 25,000 people visited the show. The new Copeland Silica Gel absorption type machine operated by gas, and refrigerating an 80 cubic foot commercial type refrigerator can be seen in the center of the booth.

REFRIGERATION VITAL TO CIVILIZATION

(*Continued from Page 1, Column 2*)

child; that there is in constant use during the year an average of seven cubic feet of cold storage space for every person in the country; that on practically any one day there are a million pounds of meat in cold storage, and that without these facilities neither the huge meat packing industry nor the equally large fruit growing industry would have been possible.

A Political Effect Claimed

"Some students of your industry," Mr. Smith told the ice and refrigerating men, "even claim a political effect for your service. They say—and I think with some justification—that in the midst of an unsettled world, the United States alone is a stable nation; that we are stable because we are conservative; that we are conservative because we are happy; and we are happy because of ice and refrigeration. That is not a mere play on words. Imagine how happy we could be today without ice for our food, without ice for our hospitals, without refrigeration for the protection of vaccines, anti-toxins, drugs and chemicals, without air-cooling for crowded theatres, schools, ocean liners, or battleships. Take ice cream alone away from us, and what would our children do? Consider the part that ice and refrigeration plays in just one item of our food supply, milk. No other food is as vital to the human race, and milk is absolutely dependent upon ice or refrigeration for its purity. Can you imagine modern civilization getting along without ice to safeguard its milk or getting along without an inexhaustible and inexpensive supply of refrigeration for this purpose?

"I am told, and if so it is an interesting fact, that if you chart the growth of cities in the United States during the last twenty-five years, and on the same paper chart the development of the ice and refrigeration industries, you get practically parallel lines. It is hard to say which is cause and which effect. No one can say with absolute certainty that the cities grew when, where and as the ice and refrigeration industries grew, or vice versa. But I am sure no one will controvert the close interdependence of these two facts.

New Uses for Electric Refrigeration

"But, large as this industry is today, and important as are the accomplishments already attained, like many of our great institutions and business developments, your industry is still in its infancy. For instance, there are twice as many automobiles in use in this country as ice boxes. Not electrical refrigerators, but plain, ordinary ice boxes, of which, I am given to understand, good ones may be bought for from ten dollars up. This means that half as many people are using ice boxes as enjoy the comfort and convenience of automobiles. Here is a great potential market for that branch of the business. And as for domestic electric refrigerators, I understand there are something like fourteen million homes and apartments wired for electric service, and less than half a million of these homes have electric refrigerators. In New York City, as I have said, thirty-four theatres have in the last two years installed elaborate air-cooling and conditioning systems, but there are more than seven hundred theatres in this city alone, of various character and size. Then there are the new and the yet uninvented uses of ice and refrigeration. I have heard recently of a proposal to flood the country with slot machines for vending ice-cream, each machine a little refrigerating plant. In Berlin I understand the oldest ice manufacturer in the city is planning the construction of a huge winter palace, to which people may go for a day's enjoyment or for an entire summer's residence and have all the exhilaration of life in the Alps.

The Job Ahead

"Then I am told by students of the industry that only ten per cent of the ice boxes in American homes use ice the year round. If this be true, what does it mean? Only that of the twenty million families in America, not all are aware of the service that ice is rendering to humanity and how it may improve their own every-day life.

"The big job ahead of these industries," Mr. Smith said, "is that of making the American public not merely ice conscious, but intelligently aware of the three main facts: first, that what you are selling is not merely a commodity, to be measured in pounds or cubic feet, but a service to industry and home, having to do with health, happiness and economy; second, that this service is as indispensable as gas, electricity or water; and, third, that the proper ventilation and air-conditioning of schools, crowded department stores and office buildings, or any other place where people come together in large numbers, is as necessary to health and happiness as good lighting, natural or artificial."

LONDON FRIGIDAIRE MEN ARE HOSTS AT BANQUET FOR BIECHLER

A dinner given on November 18 by H. L. McGurk, general manager of Frigidaire for the British Isles, to welcome E. G. Biechler, president and general manager of Frigidaire Corp., Dayton, is told of in the December issue of *Frigid Era*, the sales bulletin of the London organization.

Mr. Biechler and G. D. Riedel, European manager, had just completed a six weeks' tour of the European branches. One hundred and fifty guests were present including a large number of prominent users and dealers from all parts of England, Scotland, Ireland and Wales. Among the distinguished guests were Sir Wm. Turner, The Rt. Hon. Mayor of Belfast, and Winston Paul, Frigidaire distributor for New York.

Also present were the sub branch managers, their salesmen and executives from the London branch, and 30 salesmen who had brought in more than a specified volume of business during the preceding month.

Mr. Biechler delivered an inspiring address, specially emphasizing the fact that Dayton was attempting to co-operate 100 per cent with the foreign organization.

Mr. Riedel gave a short summary of the growth of Frigidaire in England. Entertainment was provided during and after the dinner by members of the London organization.

Correction

In the Dec. 7 issue of ELECTRIC REFRIGERATION NEWS an article appeared under the heading "Dealer Requests An Explanation of Unit Capacity Ratings" in which Harry C. Hayes, chief engineer, General Necessities Corp., Detroit, was misquoted. The saturation temperature given as 80° should have been 86° and the low side pressure in connection with ethyl chloride given as 10½ pounds should have been a *minus* 10½ pounds.

SHAFT SEALS
THERMOSTATS—FLOATS
HIGH PRESSURE CUT-OUTS
LIGHT STAMPINGS
Automatic Controls for Refrigeration and Oil Burners
GOODNOW & BLAKE MFG. CO.
3840 BEAVER STREET DETROIT, MICH.

AUTOMATIC ELECTRIC CONTROLS
NON-DETERIORATING MERCURY SWITCHES
Simple — Dependable
ABSOLUTE ELKHART
CON-TAC-TOR
Accurate — Safe
CORPORATION INDIANA

STAMPINGS
HALE & KILBURN CO.
Your volume requirements in
HOUSEHOLD
ICE CREAM
WATER COOLER
DRINK DISPENSING
MACHINE COMPARTMENT
STEEL CABINETS
1800 Lehigh Ave., Phila., Pa.
STAMPINGS

REFRIGERATION STAMPINGS
We Specialize in the Design and Manufacture of
ICE CREAM CABINETS
We make them complete or furnish parts separately
Brine Tanks - - Cooling Units
Unit Supporting Bases and Perforated Metal Covers
METAL HOUSEHOLD REFRIGERATORS (*Complete*) OR CAN FURNISH OUTSIDE STEEL PANELS, INSIDE LININGS, LOUVERED PANELS, LEGS, ETC., SEPARATELY
We Have a Competent Engineering Staff to Help You - We Solicit Your Inquiries and Specifications
MOTORS METAL MFG. CO. - DETROIT MICHIGAN

HOUSEHOLD
QUALITY SERVICE
HERRICK
THE ARISTOCRAT OF REFRIGERATORS
for
ELECTRIC REFRIGERATION
HERRICK REFRIGERATOR CO., 1019 Cedar St. .:. Waterloo, Iowa
COMMERCIAL

SPECIFY ANSUL SULPHUR DIOXIDE
The Product with a Factor of Safety
ANHYDROUS SULPHUR DIOXIDE
ANALYZED
Absolute Protection for Refrigeration
ANSUL CHEMICAL COMPANY
MARINETTE, WIS.

PIPE *and* TUBE
FITTINGS

Made From Brass Rod, Castings or Forgings

For many years we have specialized in the manufacture of brass fittings, in small sizes, for connecting brass and copper tubing.

In addition to fittings made from brass rod and castings, we are now producing similar parts made from BRASS FORGINGS to meet the requirements of Iceless Refrigerator Manufacturers for fittings of a superior type. These fittings will not leak gas, air or liquids under mechanical pressure. They have the compact grain structure, high tensile strength and smooth, flawless surfaces found only in forgings. Our forged fittings are accurately machined, carefully inspected and equal to the most exacting requirements.

Send a sample or blue-print for quotations on parts of a special nature. Catalogue No. R-30, showing our complete line of standard fittings will be mailed on request.

COMMONWEALTH BRASS CORPORATION
DETROIT 5781-5835 COMMONWEALTH AVE. MICH.